

ABSTRACT:

A data processing device has a memory with writeable and erasable locations, such as a flash memory. The memory locations are store WOM codewords (Write Once Memory codewords in which successive generations of data can be encoded by setting bits from zero to one only). A data encoder encodes a received data value in a new codeword from the WOM code, as a function of the received data value and a previous codeword stored in the currently selected location. When the WOM codeword is exhausted the data encoder selects a new currently selected location from a logical series of locations and stores the new codeword in the new currently selected location. When all locations are exhausted a reset circuit resets a content of the locations in the logical series. On reading the currently selected location is read and decoded.

Figure 1